

HILGARDIA

A Journal of Agricultural Science

PUBLISHED BY THE

California Agricultural Experiment Station

VOLUME 31

MAY, 1961 TO DECEMBER, 1961

UNIVERSITY OF CALIFORNIA
BERKELEY • DAVIS • RIVERSIDE • LOS ANGELES
1962

11/2/62

CONTENTS

PAGE

No. 1, MAY, 1961

SMITH, FRANCIS L. Seed-coat color genes in six commercial varieties of beans

1

No. 2, MAY, 1961

McKENZIE, HOWARD L. Second taxonomic study of California mealybugs, with descriptions of new species (Homoptera: Coleoidea: Pseudococcidae). (Thirteen text figures)

15

No. 3, JUNE, 1961

GROGAN, R. G., F. W. ZINK, and K. A. KIMBLE. Pathological anatomy of carrot root seab and some factors affecting its incidence and severity. (Three text figures)

53

No. 4, JULY, 1961

RUTTAN, VERNON W. The impact of irrigation on farm output in California. (Two text figures and two appendix figures)

69

No. 5, AUGUST, 1961

WEAVER, ROBERT J., O. A. LEONARD, and STANLEY B. McCUNE. Response of clusters of *Vitis vinifera* grapes to 2,4-dichlorophenoxyacetic acid and related compounds. (Seven text figures)

113

No. 6, OCTOBER, 1961

WADE, WILLIAM H. Biology of the navel orangeworm, *Paramyelois transitella* (Walker), on almonds and walnuts in northern California. (Sixteen text figures)

129

No. 7, NOVEMBER, 1961

COMPERE, HAROLD. The red scale and its insect enemies. (Thirty-five text figures)

173

No. 8, NOVEMBER, 1961

BINDRA, ONKAR SINGH, and EDWARD S. SYLVESTER. Effect of insect numbers on aphid transmission of potato leafroll virus. (Eleven text figures)

279

No. 9, NOVEMBER, 1961

LEONARD, O. A., and R. J. WEAVER. Absorption and translocation of 2,4-D and amitrole in shoots of the Tokay grape. (Twenty text figures)

327

No. 10, NOVEMBER, 1961

SUMMERS, FRANCIS M., and D. W. PRICE. New and redescribed species of *Ledermuelleria* from North America (Acarina: Stigmaeidae). (Six plates) 369

No. 11, NOVEMBER, 1961

BRUTSAERT, WILFRIED, GEORGE S. TAYLOR, and JAMES N. LUTHIN. Predicted and experimental water table drawdown during tile drainage. (Twenty-three text figures) 389

No. 12, NOVEMBER, 1961

WEAVER, R. J., O. A. LEONARD, and S. B. McCUNE. Response of Tokay grapes to spray applications of 2,4-D. (Four text figures) 419

No. 13, NOVEMBER, 1961

THOMAS, H. EARL. Virus diseases of apple. (Twenty text figures) . 435

No. 14, DECEMBER, 1961

DEBACH, PAUL, and JOHN LANDI. The introduced purple scale parasite, *Aphytis lepidosaphes* Compere, and a method of integrating chemical with biological control. (Eleven text figures) . 459

No. 15, DECEMBER, 1961

DENNIS, C. C., and L. L. SAMMET. Interregional competition in the frozen strawberry industry. (Thirty-two text figures) 499

No. 16, DECEMBER, 1961

CLAUSEN, CURTIS P. Biological control of western grape leaf skeletonizer (*Harrisina brillians* B. and McD.) in California. (Seven text figures) 613

